HALLIBURTON

SAFETY DATA SHEET BARABLOKTM

Product Trade Name:

Revision Date: 13-Apr-2015

1. Identification

Hazard Statements

Prevention

Precautionary Statements

Revision Number: 19

1.1. Product Identifier	
Product Trade Name:	BARABLOK™
Synonyms:	None
Chemical Family:	Asphalt
Internal ID Code	HM003477
1.2 Recommended use and rest	
Application:	Fluid Loss Additive
Uses Advised Against	No information available
1.3 Manufacturer's Name and Co	ontact Details
Manufacturer/Supplier	Baroid Fluid Services
	Product Service Line of Halliburton
	P.O. Box 1675
	Houston, TX 77251
	Telephone: (281) 871-4000
	Emergency Telephone: (281) 575-5000
Prepared By	Chemical Stewardship
. ,	Telephone: 1-580-251-4335
	e-mail: fdunexchem@halliburton.com
1.4. Emergency telephone num	bor
Emergency Telephone Number	(281) 575-5000
2. Hazard(s) Identification	
2.1 Classification in accordance	e with paragraph (d) of §1910.1200
Combustible dust	Combustible dust
2.2. Label Elements	
Hererd Bistograms	
Hazard Pictograms	
Signal Word	Warning

May form combustible dust concentrations in air.

None

Response	None	
Storage	None	
Disposal	None	
Contains Substances Natural asphalt		CAS Number 12002-43-6

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Natural asphalt	12002-43-6	60 - 100%	Combustible dust

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures	
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4.1. Description of first aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory		
	irritation develops or if breathing becomes difficult.		
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15		
-	minutes and get medical attention if irritation persists.		
Skin	Wash with soap and water. Get medical attention if irritation persists.		
Ingestion	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical		
-	attention.		

4.2 Most important symptoms/effects, acute and delayed

No significant hazards expected.

4.3. Indication of any immediate medical attention and special treatment needed Notes to Physician Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons None known.

5.2 Specific hazards arising from the substance or mixture

Special Exposure Hazards

Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

5.3 Special protective equipment and precautions for fire-fighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Scoop up and remove.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Ensure adequate ventilation. Wash hands after use. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 60 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Natural asphalt	12002-43-6	Not applicable	Not applicable

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

Respiratory Protection	Not normally needed. But if significant exposures are possible then the following
	respirator is recommended:
	Dust/mist respirator. (N95, P2/P3)
Hand Protection	Normal work gloves.
Skin Protection	Normal work coveralls.
Eye Protection	Wear safety glasses or goggles to protect against exposure.
Other Precautions	None known.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties Physical State: Powder Color:

i ilgoioal olaioi			Black
Odor:	Asphalt	Odor Threshold:	No information available
Property		Values	

Black

Remarks/ - Method pH: **Freezing Point/Range Melting Point/Range Boiling Point/Range** Flash Point Flammability (solid, gas) upper flammability limit lower flammability limit **Evaporation rate** Vapor Pressure Vapor Density **Specific Gravity** Water Solubility Solubility in other solvents Partition coefficient: n-octanol/water **Autoignition Temperature Decomposition Temperature** Viscosity **Explosive Properties Oxidizing Properties**

5.8 No information available. No data available No data available 315 °C / 599 °F Cleveland Open Cup (COC) No data available No data available 0.02 oz/ft3 No data available No data available No data available 1.05 Insoluble in water No data available 1.7-1.9 No data available No data available 2800 cps No information available No information available

9.2. Other information VOC Content (%) Bulk Density

2% 30 lbs/ft3

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical Stability

Stable

10.3. Possibility of Hazardous Reactions

Will Not Occur

10.4. Conditions to Avoid

None anticipated

10.5. Incompatible Materials

Strong oxidizers.

10.6. Hazardous Decomposition Products

Carbon monoxide and carbon dioxide. Toxic fumes.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity	
Inhalation	May cause mild respiratory irritation.
Eye Contact	May cause mechanical irritation to eye.

Skin Contact	May cause mild skin irritation.	
Ingestion	Irritation of the mouth, throat, and stomach.	

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Natural asphalt	12002-43-6	> 5000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) (similar substance)	> 94 mg/m3 (Rat, 4h)		
Substances	CAS Number	Skin corrosion/irritation				
Natural asphalt	12002-43-6	Non-irritating to the skin (similar su	hstances)			
	12002 40 0	internating to the skin (similar se	bstanocoj			
Substances	CAS Number	Eye damage/irritation				
Natural asphalt	12002-43-6	Non-irritating to the eye (Rabbit) (s	imilar substances)			
		1				
Substances		Skin Sensitization				
Natural asphalt	12002-43-6	Did not cause sensitization on labo	ratory animals (guinea pig) (similar	substances)		
Substances	CAS Number	Respiratory Sensitization				
Natural asphalt	12002-43-6	No information available				
		•				
Substances	CAS Number	Mutagenic Effects	Autagenic Effects			
Natural asphalt	12002-43-6		ic effects In vivo tests did not show	mutagenic effects. (similar		
		substances)				
Substances	CAS Number	Carcinogenic Effects				
Natural asphalt	12002-43-6	Did not show carcinogenic effects in animal experiments (similar substances)				
Substances	CAS Number	Reproductive toxicity				
Natural asphalt	12002-43-6		ects on fertility. Did not show terato	genic effects in animal		
		experiments. (similar substances)				
Substances	CAS Number	STOT - single exposure				
Natural asphalt	12002-43-6		animal studies at concentration requ	iring classification (similar		
	12002 43-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)				
		I				
Substances		STOT - repeated exposure				
Natural asphalt	12002-43-6	12002-43-6 No significant toxicity observed in animal studies at concentration requiring classification. (sir substances)				
Substances	CAS Number	Aspiration hazard				

12. Ecological Information

12.1. Toxicity Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to Invertebrates
				Microorganisms	
Natural asphalt	12002-43-6	No information available	LL50(95h): > 1000 mg/L (Oncorhynchus mykiss) (similar substance)		TLM96: 869,400 ppm (Mysidopsis bahia) EL50(48h): > 1000 mg/L (Daphnia magna) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Natural asphalt	12002-43-6	Not readily biodegradable

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Natural asphalt	12002-43-6	No information available

12.4. Mobility in soil

No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal MethodBury in a licensed landfill according to federal, state, and local regulations.Contaminated PackagingFollow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
US DOT Bulk DOT (Bulk)	Not applicable
Canadian TDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
IMDG/IMO UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable

IATA/ICAO

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:Not applicableSpecial Precautions for User:None

15. Regulatory Information

US Regulations

US TSCA Inventory	All components listed on inventory or are exempt.	
EPA SARA Title III Extremely Hazardous Substances	Not applicable	
EPA SARA (311,312) Hazard Class	None	
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).	
EPA CERCLA/Superfund Reportable Spill Quantity	Not applicable.	
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.	
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.	
MA Right-to-Know Law	Does not apply.	
NJ Right-to-Know Law	Does not apply.	
PA Right-to-Know Law	Does not apply.	
Canadian Regulations		
Canadian DSL Inventory	All components listed on inventory or are exempt.	

16. Other information	
Preparation Information Prepared By	Chemical Stewardship Telephone: 1-580-251-4335 e-mail: fdunexchem@halliburton.com
Revision Date:	13-Apr-2015
Reason for Revision	Update to Format SECTION: 2 3 6 7 8 10 11 12 16

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms

bw – body weight CAS – Chemical Abstracts Service EC50 – Effective Concentration 50% ErC50 – Effective Concentration growth rate 50% LC50 – Lethal Concentration 50% LD50 – Lethal Dose 50% LL50 – Lethal Loading 50% mg/kg – milligram/kilogram mg/L - milligram/liter NIOSH - National Institute for Occupational Safety and Health NTP - National Toxicology Program **OEL – Occupational Exposure Limit** PEL – Permissible Exposure Limit ppm – parts per million STEL - Short Term Exposure Limit TWA - Time-Weighted Average UN - United Nations h - hour mg/m³ - milligram/cubic meter mm - millimeter mmHg - millimeter mercury w/w - weight/weight d - day

Key literature references and sources for data

www.ChemADVISOR.com/ NZ CCID

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End of Safety Data Sheet